

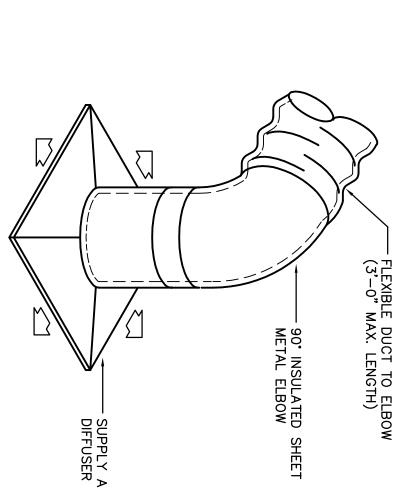
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- DUCT SPLITS TO DIVIDE FLOW SHALL BE PROPORTIONATE CFM SHOWN ON FLOOR PLANS. TO SUM TOTAL OF BRANCH DUCT
- (A) (D) ELBOW RADIUS, TAKE RECOMMENDATIONS. AND TRANSITION
- ROUND DUCT TAKE—OFFS FROM RECTANGULAR DUCTS EFFICIENCY FLANGED AND GASKETED FITTING OR A SPI GROOVE SHALL BE SO CONSTRUCTED AS TO ENSURE C DAMPERS SHALL BE FACTORY INSTALLED WITH SPRING AND A POSITIVE LOCKING WING NUT FOR EASY READJUSHALL BE FULLY GASKETED ON ALL FLANGES AND COFTAKE—OFF FITTINGS AND MASTIC SEALED AND TAPED F ALL ELBOWS SHALL BE RADIUS TYPE, EXCEPT USING 90° MITERED VANED ELBOWS.

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VOLUME DAMPERS SHALL BE PROVIDED ON ALL LOW PRESSURE SUPPLY DUCT BRANCHES AND ON ALL RETURN AND EXHAUST DUCT BRANCHES.





one inch = one foot
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DIFFUSER CONNECTION NO SCALE NOTE: ALL DUCTWORK TO BE INSULATED DOWN TO AND DIFFUSER NECK AND BACK OF DIFFUSER.

	TVBE	CFM	MAX	SIZE	BORDER OR	MATE	RIAL	ENIOL	ACCEGG	MANUFACTURER	DEMARKS
FUNCTION	ITPE	RANGE	N.C	(INCHES)	FRAME	ALUM.	STEEL	FINION	ACCESS	& MODEL NO.	ZEMAZZO
SUPPLY	SQUARE FACE NOMINAL PNL	0 - 100	25	6" Ø	12 x 12 SURFACE		×	STND.	ı	KRUEGER SERIES 1400	7
SUPPLY	SQUARE FACE NOMINAL PNL.	101 <b>-</b> 230	25	8" Ø NECK	12 x 12 SURFACE		×	STND. WHITE	ı	KRUEGER SERIES 1400	_
SUPPLY	SQUARE FACE NOMINAL PNL.	231 <b>-</b> 400	30	8" Ø NECK	12 x 12 SURFACE		×	STND. WHITE	ı	KRUEGER SERIES 1400	_
SUPPLY	FIXED DEFL. 0° BLADE	0 - 100	25	6 x 6	DUCT MOUNT	×		STND.	O.B.D.	KRUEGER SERIES	1
RETURN/ EXHAUST	PERF. PANEL 12 x 24 FACE	009 - 0	25	12 x 24	12 x 24 SURFACE	;				0	
EXHAUST	PERF. PANEL 6 x 6 FACE	0 - 120	25	6 x 6		×		STND. WHITE		KRUEGER SERIES EGC5	<u> </u>
					SURFACE MOUNT	×		STND. WHITE STND. WHITE		KRUEGER SERIES EGC5  KRUEGER SERIES EGC5	
DEMADKS:					SURFACE	×		STND. WHITE STND. WHITE		KRUEGER SERIES EGC5 KRUEGER SERIES EGC5	
	SUPPLY SUPPLY SUPPLY SUPPLY EXHAUST		SQUARE FACE NOMINAL PNL FACE NOMINAL PNL SQUARE FACE NOMINAL PNL FIXED DEFL. 0° BLADE PERF. PANEL 12 x 24 FACE PERF. PANEL 6 x 6 FACE	TYPE CFM RANGE SQUARE FACE 0 - 100 NOMINAL PNIL 500 ARE FACE 230 NOMINAL PNIL 231-FACE FACE 400 FIXED DEFL 0 - 100 FIXED DEFL 0 - 100 PERF. PANEL 12 × 24 FACE 0 - 900 PERF. PANEL 6 × 6 FACE 0 - 120	TYPE CFM MAX RANGE N.C.  SQUARE FACE 0-100 25  NOMINAL PNI. SQUARE FACE 230 NOMINAL PNI. FACE 231- FACE 400 FIXED DEFL. 0-100 25  PERF. PANEL 12 x 24 FACE 0-900 25	TYPE CFM MAX SIZE RANGE N.C. (INCHES) SQUARE FACE 101- 25 NECK SQUARE FACE 230 FACE 231- 25 NECK SQUARE FACE 231- 8"Ø FACE 231- 8"Ø FACE 231- 8"Ø FACE 231- 8"Ø FACE 500 25 6×6 PERF. PANEL 0-100 25 6×6	TYPE RANGE N.C. (INCHES) FRAME AL SQUARE FACE 0-100 25 NECK SURFACE NOMINAL PNL 230 25 NECK SURFACE NOMINAL PNL 230 8" Ø 12 × 12 FACE 230 8" Ø 12 × 12 FACE 400 NECK SURFACE NOMINAL PNL 30 NECK SURFACE NOMINAL PNL 30 NECK SURFACE NOMINAL PNL 400 25 6 × 6 MOUNT	TYPE RANGE N.C. (INCHES) FRAME ALUM. STEE  SQUARE FACE NOMINAL PNIL. 25 NECK SURFACE NOMINAL PNIL. 230 25 NECK SURFACE NOMINAL PNIL. 231 - FACE NOMINAL PNIL. 231 - GO'BLADE 0-100 25 6 × 6 MOUNT X	TYPE         CFM RANGE         MAX N.C.         SIZE (INCHES)         BORDER OR FRAME         MATERIAL           SQUARE FACE NOMINAL PNIL. SQUARE FACE Ado NECK SURFACE SUR	TYPE  CFM RANGE N.C.  SQUARE FACE NOMINAL PNIL. FACE A00  STND. STND. WHITE NECK SURFACE ALUM. STREL FIXED DEFL. WHITE WHITE WHITE WHITE WHITE WHITE WHITE WHITE  STND. STND. WHITE STND. WHITE WHITE WHITE	TYPE CFM MAX SIZE BORDER OR MATERIAL STEEL FINISH ACCESS.  SQUARE FACE NOMINAL PNL SQUARE FACE NOMINAL PNL SQUARE FACE NOMINAL PNL SQUARE FACE NOMINAL PNL SQUARE FACE SQUARE NOMINAL PNL 230 25 8"Ø 12 x 12 FACE SQUARE NOMINAL PNL 230 NECK SURFACE SURFACE X WHITE FACE NOMINAL PNL 400 25 6 x 6 MOUNT X STND. STND. SQUARE FACE SURFACE X WHITE SQUARE FACE SURFACE X WHITE SQUARE FACE STND. STND. STND. STND. STND. WHITE O.B.D.

REGISTER -

**GRILLE** 

DIFF

	FAI	N A	DH	001	) SCI	-IEDI	ULE		
SERVES	TYPE	CFM	EXT S.P	FAN RPM	DRIVE	SONES		MANUFACTURER & MODEL NO.	REMARKS
EMS CLOSET	ROOF MOUNTED CENTRIFUGAL	340	0.20"	1550	DIRECT	4.8	-	GREENHECK G-075-D	1
DIRTY HOLDING	ROOF MOUNTED CENTRIFUGAL	260	0.20"	1550	DIRECT	4.2	-	GREENHECK G-075-D	1
CYLINDER STORAGE	ROOF MOUNTED CENTRIFUGAL	200	0.25"	1500	DIRECT	4.2	ı	GREENHECK G-075-D	
ERV-1	EXHAUST HOOD	360	0.10"	·	1	•	NA	GREENHECK GRSR-10	
REMARKS: SEE MECHANIC <i>!</i>	AL/ELECTRICAL COC	ORDINAT	ION SCI	HEDULE	FOR ELE	CTRICAL	DATA.		
	SERVES  EMS CLOSET  DIRTY HOLDING  CYLINDER STORAGE  ERV-1  SEE MECHANIC/	SERVES TYPE  MS CLOSET DIRTY HOLDING CYLINDER STORAGE ERV-1 ERV-1 ERV-1 EXHAUST H EXHAUST H	SERVES TYPE  MS CLOSET DIRTY HOLDING CYLINDER STORAGE ERV-1 ERV-1 ERV-1 EXHAUST H EXHAUST H	SERVES TYPE  MS CLOSET DIRTY HOLDING CYLINDER STORAGE ERV-1 ERV-1 ERV-1 EXHAUST H EXHAUST H	SERVES TYPE  MS CLOSET DIRTY HOLDING CYLINDER STORAGE ERV-1 ERV-1 ERV-1 EXHAUST H EXHAUST H	SERVES TYPE  MS CLOSET DIRTY HOLDING CYLINDER STORAGE ERV-1 ERV-1 ERV-1 EXHAUST H EXHAUST H	SERVES TYPE CFM S.P. HOLDING CENTRIFUGAL CYLINDER STORAGE CENTRIFUGAL CENTRIFUGAL CENTRIFUGAL CENTRIFUGAL CENTRIFUGAL COPPONITED STORAGE CENTRIFUGAL CENTRIFUGAL CENTRIFUGAL CENTRIFUGAL CENTRIFUGAL CENTRIFUGAL CENTRIFUGAL COPPONITED COPPONITE CENTRIFUGAL COPPONITE COPPONITE CENTRIFUGAL COPPONITE CENTRIFUGAL COPPONITE CENTRIFUGAL COPPONITE COPPONITE COPPONITE COPPONITE CENTRIFUGAL COPPONITE COPPONITE CENTRIFUGAL COPPONITE COPPON	SERVES TYPE CFM S.P. HOLDING CYLINDER STORAGE ERV-1 EMECHANICAL/ELECTRICAL COORDINATION SCHEDULE  EACH CANDAL CAND	SERVES TYPE CFM S.P. HOLDING CYLINDER STORAGE ERV-1 EMECHANICAL/ELECTRICAL COORDINATION SCHEDULE  EACH CANDAL CAND

F-2

DOMESTIC WATER HEATER

9.5 FLA 5 FLA

HS SS

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120

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120 120

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	DON	IESTIC H	DOMESTIC HOT WATER HEATER SCHED	ER HEA	TER SC	HEDULE (GAS)	<b>S</b> )
MARK	STORAGE CAP. (GAL)	RECOVERY (GPH)	TEMPERATURE GAS INPUT	GAS INPUT (BTU/HR)	DESIGN PRESSURE	MANUFACTURER & MODEL NO.	REMARKS
DWH-1	50	116	100° F	100,000	150 PSI	A.O. SMITH CYCLONE BTX-100	1

			PUN	PUMP SCHEDULE	HED	ULE		
MARK	SERVES	TYPE	GPM	HEAD FT.	RPM	EFFICIENCY	MANUFACTURER & MODEL NO.	REMARKS
PP-1	DOMESTIC HOT WATER	HOT WATER RECIRC. PUMP	2.5	11	2,050	-	GRUNDFOS UP15-18B7	1

1	CULLIGAN HI-FLO 22, WS-060	375	37 @ 25.0 PSI LOSS	29 @ 15.0 PSI LOSS	40 @12 LBS	SB1 08 @ 00	
REWARNS	& MODEL NO.	LBS.	PEAK	CONT.	MIN.	MAX.	
DEMARKS	MANUFACTURER	SALT CAP.	ATE GPM	FLOW RATE GPM	CAP. GRAINS	EXCHANGE CAP. GRAINS	
	111	HEDULE	ENER SCI	WATER SOFTENER SCHEDULE	WAT		

FUSER SCHEDULE		M. STEEL FINISH ACCESS. & MODEL NO.	V STND. KRUEGER SERIES	ı	STND. KRUEGER SERIES	1	STND. KRUEGER SERIES	1	-	)	STND. O.B.D. KRUEGER SERIES	O.B.D.	O.B.D.	O.B.D.	O.B.D.	ND. O.B.D.	o.B.D.
		L NO.   KEWIAKKS	SERIES		SERIES		SERIES		) [] [] [] [] []	SERIES 1	SERIES	SERIES 1	SERIES 1	SERIES 1	SERIES 1	SERIES 1	SERIES 1
	376	XXV															
		т	≤	_	C		СВ	F	FLA			-	MAKK	MA X X	CU-1	CU-1	CU-1 CU-2 EF-1
MECH		ELECTRICAL CONTRACTOR	MECHANICAL CONTRACTOR	INTEGRAL WITH EQUIPMENT	COMBINATION STARTER AND	SAFETY SWITCH	CIRCUIT BREAKER	FULL VOLTAGE	FULL LOAD AMPS					DESCRIPTION	CC		
		TOR	CTOR	MENT	RAND									LOAD	LOAD 27 FLA	LOAD 27 FLA 20 FLA	27 FLA 20 FLA 1/25 HP
		퓻	XW	MR		목	NR R	Z	3R	REF	RATING	ZX IVG		<	208	<b>2</b> 08	208 <b>v</b> 120
/ ELE		HORSEPOWER	KILOWATTS	PER MAI	RECOM	NON-FUSED	NON-RE	NEMA 1	NEMA 3R	ER TO S		_		PH	P	그 그 포	P
MECHANICAL / ELECTRICAL COORDINATION		OWER	STT	PER MANUFACTURER'S	RECOMMENDATION	SED	NON-REVERSING			REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS			FURNISH/	FURNISH/ INSTALL BY	FURNISH/ INSTALL BY E/E	FURNISH/ INSTALL BY E/E	FURNISH/ INSTALL BY  E/E  E/E
; AL (	ABBREVIATION:			Sis						NS FOR	DISC	! } !	TYPE		SS	SS SS	S S S
3005	TION:	4 X	PH	R	RV	SF	SS	HS	ST	ADDITION	DISCONNECT	RATING	(AMPS)		60	60	20 60 .
₹DIN,		NEMA 4X	PHASE	REVERSING	REDUCEL	FUSE HO	SAFETY SWITCH	HP RATE	THERMAI	AL REQU		FUSE	SIZE		MR	MR MR	MR MR
OITA				NG	REDUCED VOLTAGE	LDER WIT	SWITCH	HP RATED SWITCH	THERMAL ELEM. SWITCH	REMENT			ENC	į	3R	3R 3R	3R 3R
ON SCHEDULE					出	FUSE HOLDER WITH SWITCH		<u>.</u>	WITCH	S	MOTOF	FURNISH/		BY	BY M/M	M/M M/M	M/M M/M
EDU		<	VFD		2S	3S					MOTOR STARTER	TYPE/	SIZE	ı			1 1
Ē		VOLTAGE	VARIABLE FREQU	DRIVE	TWO SPEED	THREE SPEED					FR	 	ENCL.	ı	1		ı
			FREQU		ΞD	ŒED						REMA					_

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OLTAGE ARIABLE FREQUENCY

WALL HEATER

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INTEGRAL DISCONNECT

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CONTRACTOR SHALL VERIFY/COORDINATE ALL RATINGS FOR EQUIPMENT SUPPLIED BY THE SELECTED MANUFACTURER. WHERE SUCH RATINGS ARE OTHER THAN AS INDICATED ON MECHANICAL/ELECTRICAL COORDINATION SCHEDULE, DISCONNECTS, MOTOR STARTERS, OVERCURRENT DEVICES AND RELATED REVISIONS SHALL BE PROVIDED ACCORDINGLY. THE CONTRACTOR THAT FURNISHES EQUIPMENT WITH RATINGS OTHER THAN AS INDICATED SHALL BE RESPONSIBLE FOR ALL COORDINATION AND COSTS FOR REVISIONS TO ACCOMMODATE SELECTED EQUIPMENT.

ALL FRACTIONAL HORSEPOWER MOTORS SHALL BE PROVIDED WITH INTEGRAL OVERLOAD PROTECTION.

HORSEPOWER RATED SWITCHES (SH): FOR 120 V MOTORS LESS THAN 1/2 HP, PROVIDE FUSEHOLDER WITH SWITCH, FUSED PER MANUFACTURER'S RECOMMENDATION AND NEC REQUIREMENTS. FOR 120 V MOTORS RATED 1/2 HP OR 3/4 HP, PROVIDE HP RATED TOGGLE SWITCH (WHERE BRANCH CIRCUIT OVERCURRENT DEVICE MEETS NEC REQUIREMENTS FOR SHORT-CIRCUIT PROTECTION) OR FUSED SAFETY SWITCH.

EXHAUST FAN MOTOR SHALL BE FACTORY WIRED TO WEATHERPROOF JUNCTION BOX INTEGRAL PROVIDE WEATHERPROOF HORSEPOWER RATED SWITCH (SEE GENERAL NOTES ABOVE).

\*\*OOCKABLE DISCONNECT SHALL BE FURNISHED INTEGRAL WITH VFD.

\*\*JISCONNECT AND STARTER FURNISHED BY ELECTRICAL INTEGRAL WITH MOTOR CONTROL CENT WITH FAN. ELECTRICAL CONTRACTOR TO

80.0 74.0 GAS ANNUAL FUEL
UTILIZATION EFF.
92.0% **FIRED FURNACE SCHEDULE** 0.60" **EXT S.P** 0.60" MANUFACTURER
& MODEL NO.

TRANE
TUX1C100A9361A
TRANE
TUX1B080A9421A 1, 2, 3

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SEE MECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA. PROVIDE 1" FILTER AND FRAME.
PROVIDE CASED EVAPORATOR COIL SIZED FOR NOMINAL COOLING CAPACITY LIST!

MARK ARRANGEMENT ELECTRIC WALL HEATER SCHEDULE CFM HEATING CAP. (KW)

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ALL HEATER

\RK AWH3180

1, 2

REMARKS

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<u>&gt;</u>	R CO	OLED C	ONDE	AIR COOLED CONDENSING UNIT SCHEDU	HEDULE
MARK	MARK SERVES	NOMINAL TONS CLG.	AMBIENT TEMP.	MANUFACTURER & MODEL NO.	REMARKS
CU-1	F-1	4.0	95° F	TRANE MODEL 4TTR3048A	1, 2
CU-2	F-2	3.0	95° F	TRANE MODEL 4TTR3036A	1, 2

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MARK    SUPPLY FAN   EXT SP   CFM   EXT SP   O.A.   E.A.   S.A.   O.A.   E.A.   O.A.   E.A.   S.A.   O.A.   E.A.   O.A.   E.A.   O.A.   E.A.   O.A.   E.A.   O.A.   E.A.   O.A.   O.A.   E.A.   O.A.   O.A.   E.A.   O.A.		<u> </u>	N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/N/		Drawn by	Checked by	<u></u>		Date			Date:		Approved:
MARK    SUPPLY FAN   EXHAUST FAN   SUMMER AIR CONDITIONS   WINTER AIR CONDITIONS   MANUFACTURER	Man	wing Number:	<b>5</b> 5		m	naha, N	MC Or	¥				Submittal Date:	nts (100%	Construction Documer
Project Number: AIR CONDITIONS WINTER AIR CONDITIONS & MANUFACTURER & MANUFACTURE	3	lumber: SIX	Building N					OVAT	品					SCHEDULES
SUPPLY FAN EXHAUST FAN SUMMER AIR CONDITIONS WINTER AIR CONDITIONS & MANUFACTURER CFM EXT SP CFM EXT SP O.A. E.A. O.A. E.A. O.A. E.A. S.A. & MODEL NO.  400 0.50" 360 0.50" 95°F 75°F 83°F -7°F 72°F 42°F GREENHECK MINIV-450	Q	lumber: und 4 of 636-07-134	Project N Phase 2 a				XIS	DING	BUIL			AND	STIV	MECHANICAL DET,
SUPPLY FAN EXHAUST FAN SUMMER AIR CONDITIONS WINTER AIR CONDITIONS MANUFACTURER  CFM EXT SP CFM EXT SP O.A. E.A. S.A. O.A. E.A. S.A. & MODEL NO.  400 0.50" 360 0.50" 95° F 75° F 83° F -7° F 72° F 42° F GREENHECK MINIV-450  EMECHANICAL/ELECTRICAL COORDINATION SCHEDULE FOR ELECTRICAL DATA.														
SUPPLY FAN         EXHAUST FAN         SUMMER AIR CONDITIONS         WINTER AIR CONDITIONS         MANUFACTURER           CFM         EXT SP         CFM         EXT SP         O.A.         E.A.         S.A.         O.A.         E.A.         S.A.         S.A.         MANUFACTURER           400         0.50"         360         0.50"         95° F         75° F         83° F         -7° F         72° F         42° F         GREENHECK MINIV-450				P	RICAL DAT	OR ELECTI	HEDULE F		COORDIN	ECTRICAL	HANICAL/EL	(S: SEE MECH	REMARI	
SUPPLY FAN         EXHAUST FAN         SUMMER AIR CONDITIONS         WINTER AIR CONDITIONS         MANUFACTURER           CFM         EXT SP         CFM         EXT SP         O.A.         E.A.         O.A.         E.A.         S.A.         S.A.         MODEL NO.           400         0.50"         360         0.50"         95° F         75° F         83° F         -7° F         72° F         42° F         GREENHECK MINIV-450														
SUPPLY FAN EXHAUST FAN SUMMER AIR CONDITIONS WINTER AIR CONDITIONS MANUFACTURER  CFM EXT SP CFM EXT SP O.A. E.A. S.A. O.A. E.A. S.A. & MODEL NO.	_	GREENHECK MINIV-450	42° F	72° F	-7° F	83° F	75° F	95° F	0.50"	360	0.50"	400	ERV-1	
SUPPLY FAN EXHAUST FAN SUMMER AIR CONDITIONS WINTER AIR CONDITIONS MANUFACTURER	7   7   1   1	& MODEL NO.	S.A.	E.A.	O.A.	S.A.	E.A.	O.A.	EXT SP	CFM	EXT SP	CFM	MANA	
	DEMA	MANUFACTURER	SNOITIC	R AIR CONE	WINTER	DITIONS	R AIR CON	SUMMER	ST FAN	EXHAU	Y FAN	SUPPL	MADK	

Revisions:

VA FORM 08-6231

one quarter inch = one foot

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three eighths inch = one foot

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Kenneth D. Lathrum & Associates, 1901 N. 81st Street Omaha, Nebraska 68114 402.391.5861

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Office of onstruction d Facilities anagement